UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SEP 03 2010

SR-6J

Mr. David A. Kline
Acting Chief, Superfund Section
Remediation and Redevelopment Division
Michigan Department of Natural Resources and Environment
525 West Allegan Street
Lansing, MI 48909-7973

RE: Area 1 Ecological Risk Assessment Issues: Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Dear Mr. Kline:

The United States Environmental Protection Agency (EPA) has reviewed your May 26, July 9, and August 5, 2010, letters detailing the Michigan Department of Natural Resources and Environment (MDNRE) concerns regarding the Baseline Ecological Risk Assessment (BERA) for Area 1 at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. EPA and MDNRE representatives met on July 1, 2010, to discuss this topic, and since that meeting there have been several conference calls and emails exchanged regarding the BERA.

It is my understanding that MDNRE has three primary concerns with the Area 1 BERA: the desire to include the bluebird as a receptor; the progress of the BERA work groups; and studies being conducted and/or funded by Georgia-Pacific without EPA and MDNRE input.

Bluebird Receptor

EPA has further evaluated including the bluebird as a receptor for the Area 1 BERA. After careful consideration, EPA has determined that the bluebird does not provide any significant added value to the BERA, will not further assist in risk management, and may result in significant delays to the Remedial Investigation and Feasibility Study process. Therefore, EPA is not requiring Georgia-Pacific to include the bluebird as a receptor in the Area 1 BERA.

Receptors like the American robin and woodcock, which are included in the BERA, will act as maximally exposed species. Below is a chart based on Jim Chapman's methodology for modeling of bluebird and house wren exposure and PRG calculations. The relative sensitivity of the bluebird and wren are comparable. Further, when compared to the PRG for the robin in the MDNRE developed BERA (2003), both the bluebird and house wren are also comparable. In reality, field implementation of any of the PRGs would be essentially the same.

	NOAEL Based PRG mg/kg	**LOAEL Based PRG mg/kg**
Bluebird	2.2	3.8
House wren	2.7	7.3
American Robin	1.6	8.1

Given the relatively narrow range seen for these species, the final approach to developing exposure point concentrations (EPCs) will likely have a far greater role in the decision process than the results of any one receptor.

Also, because of the Superfund program-wide implications, the process developed by Jim Chapman for defining the percentage of aquatic versus terrestrial diet for the bluebird, would require peer review before implementation, delaying the completion of the risk assessment.

Since the toxicity reference value (TRV) used for risk and preliminary remediation goal (PRG) calculations will be the same for all avian species, the sensitivity of a given species will be dependent on its life style and feeding strategy. A move to include the bluebird would require additional and significant discussions between all parties regarding acceptable exposure parameters, such as percent diet attributable to the aquatic and terrestrial pathways.

Finally, considering the fact that EPA, MDNRE and Georgia-Pacific already have agreed upon receptors (house wren, American robin, and woodcock) that appear to be as protective as the bluebird, EPA sees no technical reason to push for inclusion of the bluebird as a receptor.

<u>TRV and EPC Work Groups</u>

Although there were some scheduling delays between all parties regarding both the TRV and EPC work groups, the TRV work group

has completed its recommendations and is awaiting approval from US Fish and Wildlife service before finalization, which should occur during the next two months.

EPA has forwarded MDNRE's concerns regarding Georgia-Pacific's original EPC approach and provided recommendations for developing a path forward for EPCs. The work group is scheduled to meet in September with two additional meetings and/or calls scheduled. Members of both the TRV and EPC work group will be attending the first meeting. It is anticipated that this work group will conclude its activities by the end of the calendar year.

Additional Studies

EPA is aware of the additional research studies being designed and funded without input from EPA and MDNRE. EPA has made Georgia-Pacific aware that conducting such independent research without the Agencies' input would result in future delays in the risk assessment process, as such studies would most likely require peer review. Georgia-Pacific has stated that it does not wish to slow the risk assessment process nor repeat the peer review process. Georgia-Pacific has verbally committed to involving EPA and MDNRE in the research, and is coordinating a meeting between the researchers and Agency risk assessment scientists.

EPA believes significant progress has been made regarding both human health and ecological risk assessments at this site and wishes to build upon that progress and move forward with decisions to implement a remedy in Area 1. Further, EPA understands that future information developed and data obtained may result in risk assessments and PRGs that are different for other Areas of the Site.

If you have any questions regarding this matter, please contact James Saric at (312) 886-0992 or me at (312) 353-6553.

Sincerely,

Wendy Carney, Chief
Remedial Response Branch #1
Superfund Division

cc: Paul Bucholtz, DNRE
Daria W. Devantier, DNRE
Gary Griffith, Georgia-Pacific

Bcc:

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